

CLAIMS :

1. A coding method for coding digital video data available in the form of a video stream comprising consecutive frames divided into macroblocks themselves subdivided into contiguous blocks, said frames being coded in the form of at least I-frames, independently coded according to a coding mode said intra, P-frames, temporally disposed between said I-frames and predicted from at least a previous I- or P-frame, and B-frames, temporally disposed between an I-frame and a P-frame, or between two P-frames, and bidirectionally predicted from at least these two frames between which they are disposed, said coding method comprising the following steps :

- a structuring step, provided for capturing, for all the successive macroblocks of the current frame, related coding parameters characterizing the fact that they have been coded, or not, according to a predetermined intra prediction mode ;

- a computing step, for delivering, for said current frame, statistics related to said parameters ;

- an analyzing step, provided for analyzing said statistics and for determining the number of blocks of said current frame which exhibit, or not, said intra prediction mode ;

- a detecting step, provided for detecting, each time said number is greater than a given threshold, the occurrence of an image, or of a sub-region of an image, which is either monochrome or with a repetitive pattern ;

- a description step, provided for generating description data of said occurrences of images or sub-images either monochrome or with a repetitive pattern;

- a coding step, provided for encoding the description data thus obtained and the original digital video data.

2. An encoding device for coding digital video data available in the form of a video stream comprising consecutive frames divided into macroblocks themselves subdivided into contiguous blocks, said frames being coded in the form of at least I-frames, independently coded according to a coding mode said intra, P-frames, temporally disposed between said I-frames and predicted at least from a previous I- or P-frame, and B-frames, temporally disposed between an I-frame and a P-frame, or between two P-frames, and bidirectionally predicted from at least these two frames between which they are disposed, said encoding device comprising :

- structuring means, provided for capturing, for all the successive macroblocks of the current frame, related coding parameters characterizing the fact that they have been coded, or not, according to a predetermined intra prediction mode ;

5 - computing means, for delivering, for said current frame, statistics related to said parameters ;

- analyzing means, provided for analyzing said statistics and for determining the number of blocks of said current frame which exhibit, or not, said intra prediction mode ;

10 - detecting means, provided for detecting, each time said number is greater than a given threshold, the occurrence of an image, or of a sub-region of an image, which is either monochrome or with a repetitive pattern ;

- description means, provided for generating description data of said occurrences of images or sub-images either monochrome or with a repetitive pattern;

15 - coding means, provided for encoding the description data thus obtained and the original digital video data.

3. For use in an encoding device for coding digital video data available in the form of a video stream comprising consecutive frames divided into macroblocks themselves subdivided into contiguous blocks, said frames being coded in the form of at least I-frames, independently coded according to a coding mode said intra, P-frames, temporally disposed between said I-frames and predicted at least from a previous I- or P-frame, and B-frames, temporally disposed between an I-frame and a P-frame, or between two P-frames, and bidirectionally predicted from at least these two frames between which they are disposed, said encoding device comprising :

25 - structuring means, provided for capturing, for all the successive macroblocks of the current frame, related coding parameters characterizing the fact that they have been coded, or not, according to a predetermined intra prediction mode ;

30 - computing means, for delivering, for said current frame, statistics related to said parameters ;

- analyzing means, provided for analyzing said statistics and for determining the number of blocks of said current frame which exhibit, or not, said intra prediction mode ;

- detecting means, provided for detecting, each time said number is greater than a given threshold, the occurrence of an image, or of a sub-region of an image, which is either monochrome or with a repetitive pattern ;

5 - description means, provided for generating description data of said occurrences of images or sub-images either monochrome or with a repetitive pattern;

- coding means, provided for encoding the description data thus obtained and the original digital video data.

4. A computer program product for a digital video data coding device, comprising a set of instructions which when loaded into said coding device lead it to
10 carry out the steps as claimed in claim 3.

5. A transmittable coded signal produced by encoding digital video data according to a coding method as claimed in claim 1.